Introduction

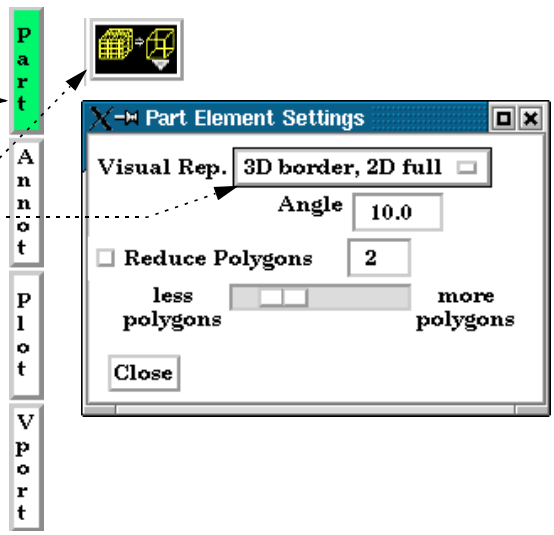
The ability to change part representations is a powerful management tool in EnSight. Not only can you select the visual representation that best meets your needs, you can also manage memory more effectively. Part representations exist on the client, the full part is maintained by the server. Using simpler representations both reduces your client memory consumption as well as improving graphics display speed.

EnSight provides five representation modes for parts:

Full	Every face and edge of every element is displayed.
Border	Only unshared faces (for 3D parts) or unshared edges (for 2D parts) are displayed.
3D Border, 2D Full	Display 3D parts in Border representation; display 2D parts in Full representation. This is the default representation for all parts.
Feature Angle	Only those edges joining faces in the Border representation for which the angle between the faces is less than some threshold are displayed. Feature Angle typically extracts the topological features of interest in a model.
Bounding Box	Only a wireframe box representing the XYZ extents is displayed.
Non Visual	No visual representation exists on the client. It is often useful to use Non Visual as the representation for 3D computational domain parts – provided you also have some sort of shell part to display the outer surface.

Basic Operation

1. **Select the desired part(s) in the Parts List.**
2. **Select Part in the Mode Selection area to enter Part mode.**
3. **Click the Element Representation icon to open the Part Element Settings dialog.**
4. **Select the desired visual representation. Options are:**



5. **If desired, you can apply polygon reduction.**

   Polygon reduction is designed to speed up visualization processing by thinning out the number of polygons that are rendered. There is naturally a trade off in image quality and speed. Note that the original model is not modified, just its rendered image.

Other Notes

Note that some derived parts (such as contours or vector arrows) are based on the client's representation of the parent part. If the parent's representation changes, the derived parts will change as well.

You cannot change the representation of a copied part. A copy always exhibits the current representation of the original part.

A part's representation can be made "permanent" by creating a new part based on the current representation. See **How to Extract Part Representations** for more information.

See Also

User Manual: **Element Representation**